

Reaching a research consensus

By Kamran Ahrar, MD, FSIR, chair, Clinical Research Trials Division

Each year, to better prioritize research needs and determine how best they should be addressed, SIR Foundation sponsors research consensus panel (RCP) meetings moderated by the chair of the Clinical Research Trials (CRT) Division. After identifying a topic of high research priority, SIR Foundation seeks and selects a principal investigator (PI) who assembles an expert multidisciplinary panel. This panel, members of government agencies U.S. Food and Drug Administration (FDA) and National Institutes of Health (NIH), and representatives of the biomedical industry are invited to gather for a full day of intense learning, discussion and debate.

The PI sets the agenda for the panel members to present on the current status of the subject matter. Through two rounds of discussion, the panel members and the audience (i.e., government and industry representatives) create a list of clinical research priorities. The panel members then vote on the priorities to determine the top three on which to focus future research efforts, including the development of a clinical trial or registry that is transformative, feasible, translational, innovative and strategic.

Protocol development for the top priority topic begins at this meeting and continues with the efforts of the PI, and input from many members of the panel. The PI and the panel members are expected to submit a white paper that outlines the proceedings of the RCP meeting for publication in the Journal of Vascular and Interventional Radiology, following appropriate peer review. The PI or any panel member can apply for an SIR Foundation Funding Source Development Grant to help cover subsequent costs associated with protocol development and to complete a grant application with the hope of acquiring government or industry funding to conduct the study.

RCP prioritizes central venous access (CVA) research and evidence-building efforts

Kevin M. Baskin, MD, medical director, Advanced Interventional Institute, Advanced Vein Center, Cranberry Township, Pennsylvania, recently led a multidisciplinary research consensus panel (RCP) on the topic “Critical issues in chronic central venous access (CVA) and pathways for investigation,” moderated by Kamran Ahrar, MD, FSIR, chair, SIR Foundation Clinical Research Trials Division. The panel included representation from several major institutions, and the audience included guests from FDA, industry and the Association for Vascular Access and several patient advocates. Participants identified more than 25 potential studies and projects that could help answer the most important clinical questions around CVA, create pivotal multi-institutional registries, provide the most promising pathways for future investigation and develop critical alliances fundamental to progress in this area of interest. Thanks to the hundreds of Discovery Campaign and annual fund donors who made this RCP possible. Visit sirfoundation.org/consensus-panels for more information.

SIR FOUNDATION

Advancing interventional radiology through research and education

CHAIR'S UPDATE

{ Winter 2014 }



Supporting the limitless potential of IR: Possibilities to realities

A letter from SIR Foundation's chair

The future of IR relies on our investment in our investigators, students and, of course, the specialty itself. As 2014 comes to a close, I want to share with you how SIR Foundation does just that, with your support. We continue to improve care through image-guided therapy with efforts like developing the IR quality registry and hosting a recent research consensus panel that proposed 13 new Physician Quality Reporting System (PQRS) measures—six of which are now on the Centers for Medicare and Medicaid Services (CMS) Measures Under Consideration (MUC) list. As you will read about in the story of Sharon W. Kwan, MD, the Comparative Effectiveness Committee is also contributing to our quality initiative. Medical students around the nation are being introduced to IR through our research internships and awards. Our premier grants program continues to grow in prominence, adding several new awards this year.

These achievements are only possible with your support. You're the reason we are making progress. You're helping by providing resources to develop 6 standardized reports that were introduced for IR this year—a vital step toward systematic data collection. A memorandum of understanding (MOU) has been executed between SIR and the American College of Radiology (ACR) to begin building an IR registry database under the National Radiology Data Registry (NRDR). ACR has begun building the IR registry database and you'll be hearing more about this exciting development throughout next year. You're the reason grant recipients like Aichi Chen, PhD, are able to purchase vital equipment or students like Joseph Tesoriero are matched with mentors.

You enable SIR Foundation's work of developing, testing and implementing breakthrough medical treatments. You are the reason IR has been strengthened through research this year. I hope you will join me in turning even more possibilities into realities for the future of IR by supporting our work. Our potential is limitless.

Warmest regards,

Stephen T. Kee, MD, MMM, FSIR
Chair, SIR Foundation



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SIR Foundation is a 501(c)(3) charitable organization that receives no funding from SIR member dues. Contributions are unrestricted and support the full mission of SIR Foundation.

SIR FOUNDATION
gala

WE SEE THE POSSIBILITIES
Building IR's future through research

Show your academic or group practice's commitment to IR's future by purchasing a table this year.

"As an academic IR practice, we appreciate and recognize that SIR Foundation has really been a critical resource to stimulate research and innovation for image-guided therapies. The IRs at University of Virginia, in conjunction with some of our former IR colleagues, felt that it was important that we support the foundation and attend the Gala. In addition, the sense of camaraderie and the spirit of IR is really a significant component of the Gala event. Lastly, it is nice that we are able to be present to support and honor those individuals who have made significant contributions to the foundation." *SIR President-elect Alan H. Matsumoto, MD, FSIR*

Visit sirfoundation.org/gala for details.

We see the possibilities:
SIR Foundation Gala supports IR research

It takes a certain kind of vision to see a better future, which is why SIR Foundation is proud to work on behalf of interventional radiologists and those who support them. Gather with your colleagues and industry supporters for an enchanting evening on Sunday, March 1, 2015, at the Georgia Aquarium—where seeing truly is believing—and where the endless possibilities of IR continue to be fostered.

- Experience more than 60 breathtaking exhibits and thousands of beautiful sea creatures, including larger-than-life whale sharks
- Dine in the elegant Oceans Ballroom, featuring the culinary genius of the Wolfgang Puck company and 360-degree views of marine life
- Celebrate research advances made possible through SIR Foundation and its donors, and be with us as the 2015 Frederick S. Keller, MD, Philanthropist of the Year is honored
- Bid on a silent auction featuring exceptional prizes

Don't miss this important night and your opportunity to personally contribute to advancing the profession through research. Please visit sirfoundation.org/gala or contact development@sirweb.org to purchase a table or tickets. A portion of your ticket will be tax deductible. Contributions are unrestricted and support the full mission of SIR Foundation.

Strengthening IR: The Comparative Effectiveness Committee

By Sharon W. Kwan, MD, co-chair

The Comparative Effectiveness Committee was tasked with completing and disseminating IR-relevant comparative effectiveness research with a rapid turnaround time. Our goals are to prioritize research topics and publish findings in order to strengthen the IR knowledge base, focusing on safety, effectiveness, resource utilization, health disparities, economics and quality of life. The deliverables of this work-group were designed to complement long-term-horizon projects such as the formation of national registries and prospective trials.

Accomplishments of our investigators include a study that compared morbidity and cost differences between open surgery and percutaneous vertebroplasty and kyphoplasty for pathologic compression fractures of the spine using Medicare claims data. We found percutaneous intervention to be less morbid and less expensive and require shorter hospital stays than open surgery.¹

We also completed a study using the National Cancer Institute’s Surveillance Epidemiology and End Results (SEER)-Medicare database, which showed that patients with early-stage lung cancer who underwent percutaneous thermal ablation had similar survival outcomes when compared to a matched cohort who underwent sublobar resection.² A follow-up health economics study comparing the relative costs and resource utilization for these two groups of patients found significant cost savings for patients who underwent ablation compared to those who underwent resection.³ A similarly designed study comparing percutaneous ablation to nephron-sparing surgery is ongoing and additional information will be available in 2015. The group also is actively investigating other novel ways to demonstrate the value of IR services—so necessary in today’s evolving health care environment.

We live in times of tightening budgets and growing oversight of finite health care resources. As practicing interventional radiologists, we know that IR treatments have had a profound impact on patient care. IR can offer options that are highly efficacious and resource efficient. As important, the minimal morbidity associated with IR procedures preserve patients’ quality of life. While we know these statements to be true from our day-to-day interactions with patients, the challenge is to demonstrate it with solid data, so that we can continue to provide these important treatments to other patients in the future. SIR Foundation welcomes the opportunity to enable increased data collection—the essential building block for establishing evidence for IR.

1. Itagaki MW, Talenfeld AD, Kwan SW, MD, Brunner JWM, Mortell KE, Brunner MC. Percutaneous vertebroplasty and kyphoplasty for pathologic vertebral fractures in the medicare population: Safer and less expensive than open surgery. JVIR 2012; jvir.org.
2. Kwan SW, Mortell KE, Talenfeld AD, Brunner MC. Thermal ablation matches sublobar resection outcomes in older patients with early-stage non-small cell lung cancer. jvir.org.
3. Kwan SW, Mortell KE, Hippe DS, Brunner MC. An economic analysis of sublobar resection versus thermal ablation for early-stage non-small-cell lung cancer. JVIR 2014; jvir.org.



‘Tis the season of giving!

SIR Foundation relies wholly on charitable donations to drive the future of IR. We are deeply grateful to the hundreds of donors who give selflessly. Here are some ways donors choose to give in support of increased evidence, research grants funding and research education for the specialty:

- Make an annual fund donation at sirfoundation.org/donate.
- Join your peers in the Pioneer Circle (see sirfoundation.org/pioneer—Founding Donor status ends Dec. 31, 2014).
- Gift honoraria or speakers fees to SIR Foundation (contact Julie Wolfe, development director, at jwolfe@sirweb.org).
- Give a gift of stock (contact Julie Wolfe, development director, at jwolfe@sirweb.org).
- Include SIR Foundation as a beneficiary in your estate plans (check out sirfoundation.org/legacy for some ideas about planned gifts and benefits to donors).
- Recommend SIR Foundation as a beneficiary of your company’s matching gifts program (call Julie Wolfe at (703) 460-5591).

Thanks for turning possibilities into realities through support of research by considering SIR Foundation in your year-end charitable giving plans!

Don’t Forget!

- **DECEMBER 14** —
Applications are due for:
 - Academic Transition Grant
 - Allied Scientist Grant
 - Dr. Ernest J. Ring Academic Development Grant
Supported, in part, by a generous Discovery Campaign contribution from AngioDynamics
- Funding Source Development Grant
- Pilot Research Grant Program
Supported in part, by a generous Discovery Campaign contribution from C.R. Bard

- **DECEMBER 31** —
 - Last day to make a 2014 charitable gift to SIR Foundation (sirfoundation.org/donate)

- **JANUARY 11** —
 - Last day to apply for the HHMI-SIR Foundation Medical Research Fellowship Award

- **FEBRUARY 1** —
Applications are due for:
 - Radiology Resident Research Grant
 - Student Research Grant

Please visit sirfoundation.org for updates and application details.

SIR Foundation typically receives more meritorious applications than can be funded. Help us drive breakthrough treatments that harness the power of image-guided therapies. Please visit sirfoundation.org/donate to strengthen the resources for research funding.

As 2014 comes to a close ... thank you!

We asked some of the recent grant and award recipients to share their sentiments about the impact that SIR Foundation donors have had on their careers. Here’s what they told us ...

“The SIR Foundation grant played a pivotal role in my research, as it allowed me to stay near my home institution and work with my mentors on understanding health care costs this summer. As I transitioned into my second year of medical school, SIR Foundation has continued to support both my research and growing interest in IR. I appreciate the hundreds of SIR Foundation donors who gave so that I could have this incredible experience.”
—Angela Wang, Medical College of Wisconsin, Student Research Grant Recipient

“Millions of water drops form the oceans; similarly little donations can bring big change. I am very grateful to SIR Foundation and its generous donors who have funded my pilot endeavors and I am glad that they saw future innovation through my perspective. Therefore, their continued donations could bring a scientific revolution and the coming generations would be thankful for the fruit they will eat; the seed of which donors are sowing today.”
—Muhammad Naeem, MD, Brown University, Pilot Research Grant Recipient

“This SIR Foundation grant enabled us to purchase essential equipment to develop a new tool for visualizing blood flow during endovascular procedures. We are grateful to foundation supporters for what is a vital piece of our research.”
—Aichi Chien, PhD, UCLA, Dr. Ernest J. Ring Academic Development Grant Recipient

A gift to SIR Foundation is a gift to the future. Visit sirfoundation.org/donate to provide a tax-deductible donation before Dec. 31, 2014

SIR Foundation | 3975 Fair Ridge Drive, Suite 400 N, Fairfax, VA 22033
sirfoundation.org | sirfoundation.org/donate | (703) 460-5591

Advancing IR through research: 2014 SIR Foundation grant recipients (through June 2014)

These grants, like all SIR Foundation programs, are funded through the generosity of Discovery Campaign, Gala and Annual Fund donors.

DR. ERNEST J. RING ACADEMIC DEVELOPMENT GRANT—SUPPORTED BY ANGIODYNAMICS

Aichi Chien, PhD—UCLA
Rapid quantification of blood flow and device-induced flow changes from 2D angiograms

PILOT RESEARCH GRANT—SUPPORTED BY C.R. BARD

Richika Bhatt, MD—University of Pennsylvania
Treatment of upper-extremity venous thrombosis associated with peripherally inserted central catheters: A randomized controlled trial

Muhammad Naeem, MD—Brown University
Novel molecular targeting of Necl-5 to prevent intimal hyperplasia and restenosis

Evelyn Nieves, MD—Mayo Clinic
miR-21 in venous neointimal hyperplasia associated with arterial venous fistulas

Alda Tam, MD, MBA—The University of Texas MD Anderson Cancer Center
Visual and functional characterization of nanopore formation after irreversible ectroporation (IRE) in the porcine vertebral body

David Wang, MD—Stanford University
Ultrasound and microbubble-mediated therapeutic microRNA modulation of hepatocellular carcinoma

RADIOLOGY RESIDENT RESEARCH GRANT

Phillip Parmet, MD—UT Health Science Center at Houston
Evaluation of effects of electroporation and gemcitabine nanoparticle formulation on tumoral response in a pancreatic adenocarcinoma nude mouse model

STUDENT RESEARCH GRANT

Angela Wang—Medical College of Wisconsin
Understanding costs in interventional radiology and vascular surgery

Can you help us achieve more in research?

Please visit sirfoundation.org/donate to strengthen the resources for research funding.